

AMENDMENTS TO THE SPECIFICATION

Page 5

Please amend page 5, beginning at line 17, as follows:

In FIGS. 17(a) – (d), Fig. 17(a) is an image data configuration diagram in which only real sweep data is represented by numerical values, and Fig. 17(b) is an image configuration diagram in which intensity is changed based on the numerical values of Fig. 17(a). Fig. 17(c) is an image data configuration diagram in which each pixel data in the image memory 8 of the conventional example is represented by numerical values, and Fig. 17(d) is an image configuration diagram in which intensity is changed based on the numerical values of Fig. 17(c).

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Please amend page 6, beginning at line 8, as follows:

As another example, in FIGS. 18(a) – (d), Fig. 18(a) is an image data configuration diagram when only real sweep data is represented by numerical values, and Fig. 18(b) is an image configuration diagram in which intensity is changed based on the numerical values of Fig. 18(a). Fig. 18(c) is an image data configuration diagram in which each pixel data in the image memory 8 of the conventional example is represented by numerical values, and Fig. 18(d) is an image configuration diagram in which intensity is changed based on the numerical values of Fig. 18(c). Note that, also in FIGS. 18(a) – (d), a higher density of a pixel indicates a higher intensity of the pixel.

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Please amend, starting on page 10, line 20, as follows:

Brief Description of Drawings

FIG. 1 is a block diagram illustrating a structure of a major portion of a radar apparatus of an embodiment of the present invention.

FIG. 2 is an equivalent circuit diagram of a sweep azimuth generator 12.

FIG. 3 is a timing chart of the sweep azimuth generator 12.

FIG. 4 is an equivalent circuit diagram of a sweep data generator.

FIG. 5 is a diagram for explaining a reference for solitary data.

FIG. 6 is an equivalent circuit diagram of a solitariness remover 31.

FIG. 7 is a timing chart of a solitariness removing operation.

FIG. 8(a) is a data configuration diagram illustrating details of a solitariness removing process.

FIG. 8(b) is a data configuration diagram illustrating details of a solitariness removing process.

FIG. 8(c) is a data configuration diagram illustrating details of a solitariness removing process.

FIG. 9 is an equivalent circuit diagram of a linearly interpolated data generator 34.

FIG. 10 is a timing chart of the radar apparatus of the embodiment.

FIG. 11 is a configuration diagram of real sweeps and interpolated sweeps in one cycle of sweeping by the radar apparatus of the embodiment.

FIG. 12(a) is a detection image configuration diagram.

FIG. 12(b) is a detection image configuration diagram.

FIG. 12(c) is a detection image configuration diagram.

FIG. 12(d) is a detection image configuration diagram.

FIG. 12(e) is a detection image configuration diagram.

FIG. 12(f) is a detection image configuration diagram.

FIG. 13(a) is a detection image configuration diagram.

FIG. 13(b) is a detection image configuration diagram.

FIG. 13(c) is a detection image configuration diagram.

FIG. 13(d) is a detection image configuration diagram.

FIG. 13(e) is a detection image configuration diagram.

FIG. 13(f) is a detection image configuration diagram.

FIG. 14 is a block diagram illustrating a structure of a major portion of a conventional radar apparatus.

FIG. 15 is a timing chart of the conventional radar apparatus.

FIG. 16 is a sweep configuration diagram of image data by the conventional radar apparatus.

FIG. 17(a) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 17(b) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 17(c) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 17(d) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 18(a) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 18(b) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 18(c) is a detection image configuration diagram by the conventional radar apparatus.

FIG. 18(d) is a detection image configuration diagram by the conventional radar apparatus.

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Please amend page 19, beginning at line 2 as follows:

FIGS. 8(a) – (c) is show a data configuration diagrams illustrating details of the solitariness removing process, and Fig. 8(a) is a data configuration diagram before the solitariness removing process, Fig. 8(b) is a data configuration diagram after the solitariness removing process, and Fig. 8(c) is a data configuration diagram illustrating a state of interpolated sweep data which is generated based on these pieces of data using a linear interpolation process described below and is stored in the image memory 8. Note that, in this figure, the threshold value is assumed to be “1”.

In sweep data of Fig. 8(a), data $D\alpha 1$ of a real sweep θm and data $D\alpha 2$ of a real sweep θn are solitary data. Therefore, the data $D\alpha 1$ and $D\alpha 2$ are subjected to the solitariness removing process so that, as illustrated in Fig. 8(b), one of adjacent pieces of sweep data in the distance direction which is the smaller is replaced with data “0”. Based on this data configuration, interpolated sweep data between adjacent pieces of real sweep data is generated using a linear

interpolation process described below. Thereby, data actually stored in the image memory 8 has the configuration of Fig. 8(c).

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Please amend page 26, beginning at line 8, as follows:

~~In FIGS. 12,~~ 12(a) to (f) are configuration diagrams of detection images. Here, Fig. 12(a) is an image configuration diagram in which actual received data is represented by numerical values, and Fig. 12(b) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 12(a). Fig. 12(c) is an image configuration diagram in which image data when the process of the present invention is used is represented by numerical values, and Fig. 12(d) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 12(c). Fig. 12(e) is an image configuration diagram in which image data when the conventional process is used is represented by numerical values, and Fig. 12(f) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 12(e). Note that, in Fig. 12(b), Fig. 12(d), and Fig. 12(f), a higher density of a pixel indicates a higher intensity of the pixel.

Pages 26 – 27

Please amend pages 26 – 27, beginning at page 26, line 24, as follows:

~~In FIGS. 13,~~ 13(a) to (f) are also configuration diagrams of detection images. Here, Fig. 13(a) is an image configuration diagram in which actual received data is represented by numerical values, and Fig. 13(b) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 13(a). Fig. 13(c) is an image configuration diagram in which image data when the process of the present invention is used is represented by

numerical values, and Fig. 13(d) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 13(c). Fig. 13(e) is an image configuration diagram in which image data when the conventional process is used is represented by numerical values, and Fig. 13(f) is a configuration diagram of an image in which intensity is changed, depending on the numerical values of Fig. 13(e). Note that, in Fig. 13(b), Fig. 13(d), and Fig. 13(f), a higher density of a pixel indicates a higher intensity of the pixel of the pixel.